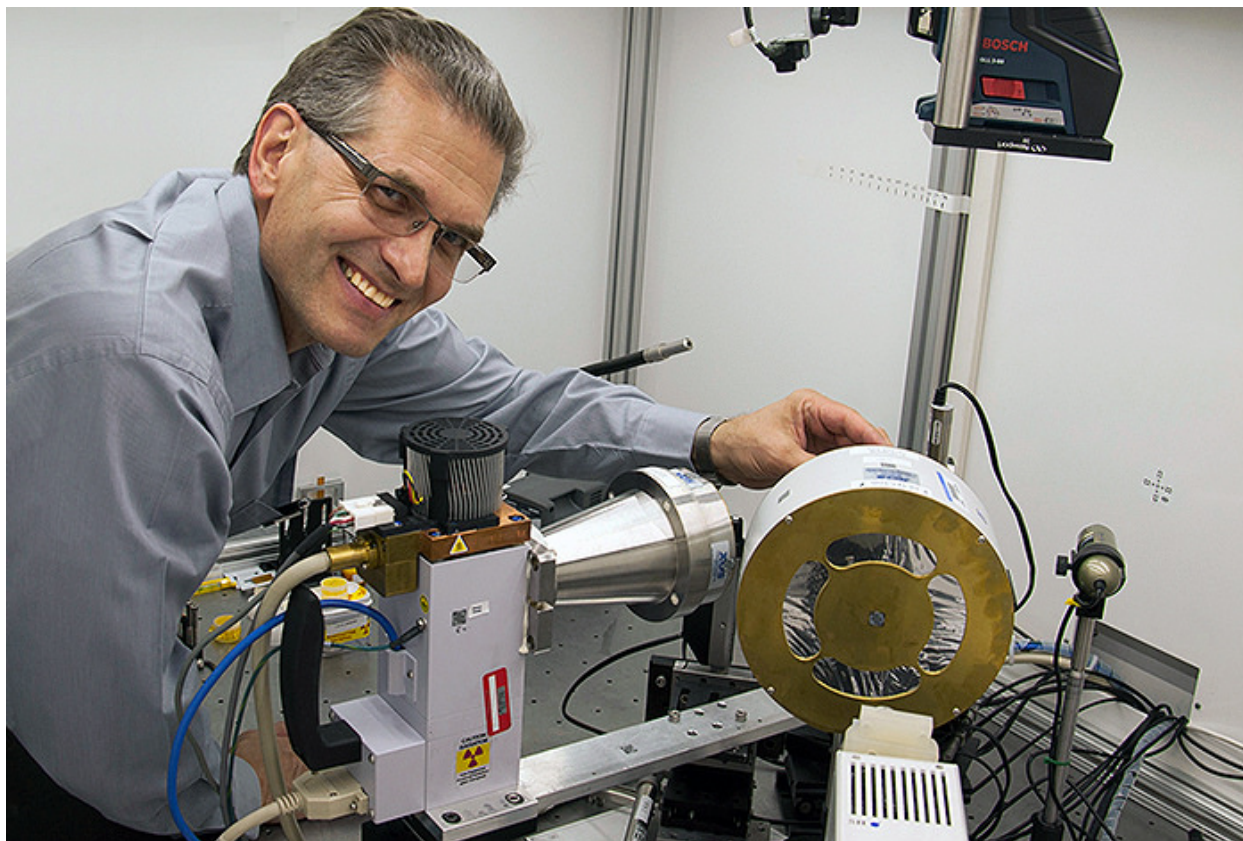


## Havrilla wins Birks Award

September 23, 2014



George Havrilla of LANL's Chemical Diagnostics and Engineering group is the 2014 Birks Award recipient, presented by the Denver X-ray Conference. This award is given to individuals who have made outstanding contributions to the X-ray spectrometry field. The Conference cited Havrilla for "his many contributions to microXRF (X-ray fluorescence), especially the development of the confocal XRF microscope; for leadership in Analytical XRF; and for exemplary service to the community, including 19 years on the Denver X-ray Conference Organizing Committee, nine years as North American editor of *X-ray Spectrometry* and six years as co-editor-in-chief for *Advances in X-ray Analysis*."

### Havrilla's achievements

Havrilla received his doctorate from West Virginia University, and joined LANL in 1993. He has been working in X-ray spectroscopy for more than 30 years. His expertise is in micro-X-ray fluorescence, confocal micro X-ray fluorescence, small volume and dried residue sampling, ultra-high energy X-ray fluorescence, and high resolution

X-ray (hiRX). Havrilla has received two R&D 100 awards recognizing his scientific innovations.

Over the last several years, Havrilla has been developing a novel X-ray based method for improved plutonium assay for safeguards applications, monitoring spent fuel reprocessing plant processes, and ensuring more accurate Pu accounting. The advantage of the hiRX method over existing ones is the direct measurement of actinide elements. Current methods are indirect and employ significant corrections to determine a Pu value with an appreciable level of uncertainty. These capabilities support applications in the Laboratory's Global Security and Energy Security mission areas and the Science of Signatures science pillar.

#### About the Birks Award

The Denver X-ray Conference Advisory Committee established the Birks Award in 1986 to recognize outstanding contributions to the field of X-ray spectrometry. The award is named in honor of L. S. (Verne) Birks for his many contributions to the X-ray analysis field. Presented biennially, the award is made possible through the generosity of the companies and organizations that exhibit their products at the Denver X-ray Conference. The Birks Award consists of a commemorative plaque detailing the recipient's scientific achievements and contributions to the field of X-ray spectrometry, a gift of \$1,000 and the recipient's travel expenses to the conference.

The award was presented at the Plenary Session of the Denver X-ray Conference on July 30. The International Centre for Diffraction Data organized the Conference. The Centre is a non-profit scientific organization dedicated to collecting, editing, publishing, and distributing powder diffraction data for the identification of crystalline materials.

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